

wafer 1 is used for producing a semiconductor light emitting element, and formed by sequentially growing a plurality of epitaxial crystal layers on a semi-insulating GaAs substrate 2 using an organic metal vapor phase epitaxy (hereafter, referred to as OMVPE) method. --

IN THE CLAIMS:

Please cancel claims 3 and 4 without prejudice or disclaimer of any of the subject matter contained therein.

Please amend the claims as follows:

1. (Amended) A 3-5 group compound semiconductor comprising a GaAs substrate, a buffer layer on said GaAs substrate and an epitaxial crystal layer on said buffer layer, said layers being formed by an epitaxial crystal growth method, wherein said buffer layer has a structure formed by laminating at least two kinds of layers having different compositions for n ($1 \leq n \leq 30$) times, where n is the number of repetitions of the two kinds of layers, and the two kinds of layers are a $\text{Ga}_{1-z}\text{Al}_z\text{As}$ layer (wherein $0 < z \leq 1$) and a GaAs layer, and the dislocation density in the epitaxial crystal layer on said buffer layer is $2000/\text{cm}^2$ or less.

2. (Amended) A 3-5 group compound semiconductor comprising a GaAs substrate, a buffer layer on said GaAs substrate and an

epitaxial crystal layer on said buffer layer, said layers being formed by an epitaxial crystal growth method, wherein

said buffer layer has a structure formed by laminating at least two kinds of layers having different compositions for n ($1 \leq n \leq 30$) times, where n is the number of repetitions of the two kinds of layers, and the two kinds of layers are a $\text{Ga}_{1-z}\text{Al}_z\text{As}$ layer (wherein $0 < z \leq 1$) and a GaAs layer, and the dislocation density in said epitaxial crystal layer on the buffer layer is $1/3$ or less of the dislocation density in said GaAs substrate.

5. (Amended) The 3-5 group compound semiconductor according to claim 1 or 2, wherein the value of said z is 0.01 or more and 0.4 or less.

6. (Amended) The 3-5 group compound semiconductor according to claim 1 or 2, wherein at least one layer of said two kinds of layers is doped with an n-type dopant.

8. (Amended) The 3-5 group compound semiconductor according to claim 1 or 2, wherein an n-type dopant is planar-doped in at least one layer of said two kinds of layers.

9. (Amended) The 3-5 group compound semiconductor according to claim 1 or 2, wherein an n-type dopant is planar-doped on the interface of at least one layer of said two kinds of layers.

11. (Twice Amended) A light-emitting element comprising the 3-5 group compound semiconductor of claim 1.

Please add the following claims:

--14. The 3-5 group compound semiconductor according to claim 1 or 2, wherein n is 2 to 30.--

--15. The 3-5 group compound semiconductor according to claim 1 or 2, wherein n is 2 to 20.--

Attached hereto is a marked-up version of the changes made to the application by this Amendment.